

What is claimed is:

1. A wheel support bearing assembly which comprises:

an outer member having an inner peripheral surface formed with a plurality of inner raceways;

an inner member positioned inside the outer member with an annular working space defined between it and the outer member, said inner member having an outer peripheral surface formed with inner raceways in mating relation with the respective inner raceways in the outer member;

rows of rolling elements accommodated within the annular working space and rollingly received in part within the outer raceways in the outer member and in part within the inner raceways in the inner member; and

at least one sealing member fitted to one of the inner and outer members for sealing one of opposite open ends of the annular working space delimited between the inner and outer members, said sealing member having a plurality of elastic sealing lips which extend towards a sealing surface defined directly on the other of the inner and outer members or defined on a sealing contact member fitted to the other of the inner and outer members, one of said elastic sealing lips extending in a direction generally axially inwardly of the annular working space and defining an axially innermost sealing lip while the other elastic sealing lips being kept in sliding contact with the sealing surface;

wherein the innermost sealing lip is a non-contact sealing lip leaving a gap between a free end thereof and the sealing surface of the sealing contact member, said gap being of a size sufficient to permit flow of air therethrough and also to provide a non-contact sealing effect when a relative rotation takes place between the outer and inner members.

2. The wheel support bearing assembly as claimed in Claim 1, wherein the at least one sealing member includes a core metal and an elastic member rigidly mounted on the core metal and wherein all of the elastic sealing lips are an integral part of the elastic member.

3. The wheel support bearing assembly as claimed in Claim 1, wherein the gap is defined in a radial direction between a free end face of the axially innermost sealing lip and the sealing surface

4. The wheel support bearing assembly as claimed in Claim 3, wherein the free end of the axially innermost sealing lip extends inwardly of the annular working space between the inner and outer members.

5. The wheel support bearing assembly as claimed in Claim 1, wherein the free end face of the axially innermost sealing lip which confronts the sealing surface has a width, as measured in a direction across a thickness of the axially innermost sealing lip, which is greater than that of any one of the remaining elastic sealing lips.

6. The wheel support bearing assembly as claimed in Claim 1, wherein the free end face of the axially innermost sealing lip is grooved.

7. The wheel support bearing assembly as claimed in Claim 6, wherein the number of the grooves defined in the free end face of the axially innermost sealing lip is two or more.

8. The wheel support bearing assembly as claimed in Claim 1, wherein the sealing contact member includes a cylindrical wall and an radially upright wall protruding radially outwardly from the cylindrical wall so as to render the sealing contact member to represent a generally L-sectioned configuration, and wherein the innermost elastic sealing lip confronts a first portion of the sealing surface defined on an outer peripheral surface of the cylindrical wall and at least one of the remaining elastic sealing lips is held in sliding contact with a second portion of the sealing surface defined on the radially upright wall that confronts the sealing member.

9. The wheel support bearing assembly as claimed in Claim 1, further comprising a ring-shaped multi-pole magnet secured to the sealing contact member, said multi-pole magnet magnetized to have a plurality of opposite

magnetic poles alternating with each other in a direction circumferentially thereof.

10. The wheel support bearing assembly as claimed in Claim 1, wherein the inner member has one end formed with a flange which extends radially outwardly beyond a level of an outer periphery of a cylindrical portion of the outer member and wherein the sealing member is used to seal one of the opposite open ends of the annular working space adjacent such flange.